AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-26: (Canceled)

Claim 27: (Previously Presented) A pyrimidone compound represented by formula (I) or a pharmaceutically acceptable salt thereof:

$$\begin{array}{ccc}
R^3 & & & \\
N & & R^2 & \\
R^1 & N & O & \\
\end{array}$$

wherein

R¹ represents a group represented by -N(R⁴)-W-R⁵ wherein

R⁴ represents a hydrogen atom;

 $m R^5$ represents a $m C_1$ - $m C_{18}$ alkyl group which may be substituted, a $m C_3$ - $m C_{18}$ alkenyl group which may be substituted, a $m C_3$ - $m C_{18}$ alkynyl group which may be substituted, a $m C_3$ - $m C_8$ cycloalkyl group which may be substituted, or a $m C_6$ - $m C_{14}$ aryl group which may be substituted, and

symbol "W" represents a single bond, a carbonyl group, a sulfonyl group, NH or a nitrogen atom substituted with a C_1 - C_{18} alkyl group which may be substituted;

R² represents a hydrogen atom; and

R³ represents a 4-pyridyl group which may be substituted.

Claim 28: (Previously Presented) The pyrimidone compound or the pharmaceutically acceptable salt thereof according to claim 27 wherein R^5 represents a C_1 - C_{18} alkyl group substituted with a C_6 - C_{10} aryl.

Claim 29 (Canceled)

Claim 30: (Previously Presented) The pyrimidone compound or the pharmaceutically acceptable salt thereof according to claim 27 wherein R² represents a hydrogen atom.

Claim 31: (Currently Amended) The pyrimidone compound or the pharmaceutically acceptable salt thereof, or the solvate thereof, or the hydrate thereof according to claim 27 wherein the symbol "W" represents a single bond or a carbonyl group.

Claim 32: (Previously Presented) The pyrimidone compound or the pharmaceutically acceptable salt thereof according to claim 31 wherein the symbol "W" represents a single bond.

Claim 33: (Previously Presented) A pyrimidone compound represented by formula (I) or a pharmaceutically acceptable salt thereof:

$$\begin{array}{ccc}
R^3 & & \\
N & R^2 & \\
R^1 & N & O
\end{array}$$

wherein R¹ represents a group represented by -N(R⁴)-W-R⁵ wherein

 R^4 represents a hydrogen atom, a C_1 - C_{18} alkyl group which may be substituted, a C_3 - C_{18} alkenyl group which may be substituted, a C_3 - C_{18} alkynyl

group which may be substituted, a C_3 - C_8 cycloalkyl group which may be substituted, or a C_6 - C_{14} aryl group which may be substituted,

R⁵ represents an alkyl group which may be substituted, said alkyl group being one of ethyl group, n-propyl group, isopropyl group, n-butyl group, isobutyl group, sec-butyl group, tert-butyl group, n-pentyl group, isopentyl group, neopentylgroup, 1,1-dimethylpropyl group, n-hexyl group, isohexyl group, a linear or branched heptyl group, octyl group, nonyl group, decyl group, undecyl group, dodecyl group, tridecyl group, tetradecyl group, pentadecyl group or octadecyl group, a C₃-C₁₈ alkenyl group which may be substituted, a C₃-C₁₈ alkynyl group which may be substituted, or a C₆-C₁₄ aryl group which may be substituted, and

symbol "W" represents a single bond, a carbonyl group, a sulfonyl group, NH or a nitrogen atom substituted with a C_1 - C_{18} alkyl group which may be substituted;

R² represents a hydrogen atom or a halogen atom; and

R³ represents a 4-pyridyl group which may be substituted.

Claim 34 (Canceled)

Claim 35: (Previously Presented) The pyrimidone compound or the pharmaceutically acceptable salt thereof according to claim 33 wherein R² represents a hydrogen atom.

Claim 36: (Previously Presented) The pyrimidone compound or the pharmaceutically acceptable salt thereof according to claim 33 wherein the symbol "W" represents a single bond or a carbonyl group.

Claim 37: (Previously Presented) The pyrimidone compound or the pharmaceutically acceptable salt thereof according to claim 36 wherein the symbol "W" represents a single bond.

Claim 38: (Previously Presented) The pyrimidone compound or a pharmaceutically acceptable salt thereof according to claim 33 wherein R¹ represents N,N-diethylamino group, N,N-dipropylamino group, N-benzyl-N-methylamino group, N-isobutyl-N-methylamino group, N-benzylamino group, N-(3-hydroxypropyl)amino group, N-cyclohexylmethylamino group, N-phenylamino group, N-(4-ethylphenyl)amino group, N-(3-bromophenyl)amino group or N-(3-methoxyphenyl)amino group.

Claim 39: (Previously Presented) A pyrimidone compound which is selected from the group consisting of:

- 2-(N-phenylamino)-6-(4-pyridyl)pyrimidin-4-one,
- 2-(N,N-diethylamino)-6-(4-pyridyl)pyrimidin-4-one,
- 2-(N,N-dipropylamino)-6-(4-pyridyl)pyrimidin-4-one,
- 2-(N-benzylamino)-6-(4-pyridyl)pyrimidin-4-one,
- 2-(N-benzyl-N-methylamino)-6-(4-pyridyl)pyrimidin-4-one,
- 2-(N-(3-bromophenyl)amino)-6-(4-pyridyl)pyrimidin-4-one,
- 2-(N-(4-ethylphenyl)amino)-6-(4-pyridyl)pyrimidin-4-one,
- 2-(N-(3-methoxyphenyl)amino)-6-(4-pyridyl)pyrimidin-4-one,

2-(N-cyclohexylmethylamino)-6-(4-pyridyl)pyrimidin-4-one, and 2-(N-isobutyl-N-methylamino)-6-(4pyridyl)pyrimidin-4-one, or a pharmaceutically acceptable salt thereof.

Claim 40: (Previously Presented) A pharmaceutical composition comprising as an active ingredient a substance selected from the pyrimidone compound or a pharmaceutically acceptable salt thereof according to claim 27.

Claim 41: (Previously Presented) A pharmaceutical composition comprising as an active ingredient a substance selected from the pyrimidone compound or a pharmaceutically acceptable salt thereof according to claim 33.

Claim 42: (Previously Presented) A method for therapeutic treatment of Alzheimer disease, which comprises administering to a patient a therapeutically effective amount of a substance selected from a pyrimidone compound represented by formula (I) or a pharmaceutically acceptable salt thereof:

$$\begin{array}{c|c}
R^3 \\
R^1 \\
R \\
H
\end{array}$$
(1)

wherein

R¹ represents a group represented by -N(R⁴)-W-R⁵ wherein

 R^4 and R^5 independently represent a hydrogen atom, a C_1 - C_{18} alkyl group which may be substituted, a C_3 - C_{18} alkenyl group which may be substituted, a C_3 - C_{18} alkynyl group which may be substituted, a C_3 - C_8 cycloalkyl group which

may be substituted, or a C₆-C₁₄ aryl group which may be substituted, and symbol "W" represents a single bond, a carbonyl group, a sulfonyl group, NH or a nitrogen atom substituted with a C₁-C₁₈ alkyl group which may be substituted;

 $[\]ensuremath{\mbox{R}^2}$ represents a hydrogen atom or a halogen atom; and

R³ represents a pyridyl group which may be substituted.